

PIREPS



IAC Aerobatic Meet Held at Seward

By Dennis Crispin

PIREPS

August – September 2019

Volume 70, Issue 5

Published bi-monthly by

**Nebraska Dept. of Transportation
Aeronautics Division**

PO Box 82088
Lincoln NE 68501
402-471-2371

dot.nebraska.gov/aeronautics

Governor Pete Ricketts

NDOT Director
Kyle Schneeweis

Aeronautics Commission

Tom Trumble, Chair

Michael Cook Dick Trail
Diana Smith Terri Wachter

Administration

Director Ann Richart
Deputy Director.....Andre Aman

NDOT.pireps@nebraska.gov
Circulation: 3320

NEBRASKA

Good Life. Great Journey.

DEPARTMENT OF TRANSPORTATION

Things appeared to be off to a bad start—rain all night and thunderstorms predicted for the rest of the day. Then, about mid-morning, event organizers opened the hangar doors to discover the rain had stopped and patches of blue sky were appearing overhead. Then gentle breezes and comfortable temperatures allowed for a grand day of competition aerobatics.

IAC Chapter 80, also known as the Midwest Aerobatic Club (MAC80), holds the Midwestern Aerobatic Championships in Seward, Nebraska, each June. The club was organized in 1975 to support the aerobatic community in Nebraska and Iowa. This year's contest was held June 23-25, 2019.

Competition Categories

Aerobatic competition is divided into five categories: Primary, Sportsman, Intermediate, Advanced and Unlimited. Each step represents an increased level of difficulty, skill and pilot qualification.

The contestant first flies a **known sequence**, a series of maneuvers standardized for all the contests across the nation. The next flight (for all categories except primary) allows the pilot to fly a **freestyle sequence**, combining elements that he or she designs to demonstrate the best the individual pilot and plane can do. Then the upper level classes finish with an **unknown sequence**. A list of maneuvers is given to the contestant one day ahead of time. The pilot has some time to mentally prepare for the flight but cannot practice the series. This first-time performance has to be done before the judges.

Judging is done by a panel of five experts, each with two assistants. Every element is graded according to a set standard on a scale from one to ten. The five grades are averaged, then multiplied by a "K factor" (a mathematical determination of the difficulty of the maneuver) to arrive at the points awarded.

The performance is contained strictly within a limited bit of airspace called "the box."

The sides of the box are monitored by *corner judges* who deduct points for violating the space requirements. The *floor* of the box is set at 1,500 feet above the ground for the primary group and decreases in steps to 329 feet for the unlimited participants. The altitude is determined by the expertise of the judges. The elements of the flight program are diagramed, for both the contestants and the judges, in a form of shorthand called the *Aresti Key*.

The pilots come from diverse backgrounds. Many are aviation professionals, but a good many are hobbyists who find the demands and rewards of aerobatic flight an exhilarating experience. Those who reach the higher levels of the sport spend years, hundreds of hours of practice and many competitions to perfect their skills.

Variety of Aircraft

Common aircraft do not have the inherent strength and maneuverability to perform competitive aerobatics. So, the planes used are designed and built expressly for the sport. Most have special fuel and oil systems that allow the engines to operate in inverted and high G-load situations.

The great majority of the competitors fly the Pitts Special. This small biplane, usually painted red, has become the iconic aerobatic airplane. Popular with the primary and sportsman categories is the Decathlon, a high-wing, two-seat aircraft that allows an instructor to coach the beginning pilot. The participants in advanced and unlimited categories often fly aircraft like the Extra 300 and MX2, sleek and powerful monoplanes expressly suited for difficult aerobatics. A sprinkling of homebuilt aircraft is included in the lineup.

While aircraft can be engineered to withstand the forces developed within the violent maneuvers, the human body is

stuck with the same old design and its inherent limits. A key part of the training and practice is acclimation of the body to the G-loads. The pilots learn to momentarily tense the abdominal and leg muscles to offset some of the negative physical effects of tight turns and sharp pullups. As a safety measure, parachutes are worn at all times while performing aerobatics.

A significant part of the competition is the collegiate aerobatic teams. Groups representing flying clubs and aviation programs of colleges and universities vie for nationwide ranking. Two groups participated at the Seward meet. A team of ten competitors with three ground crew represented the Aviation and Aerospace program at Metropolitan State University of Denver. They shared a Pitts S-2C. UND Aerospace at the University of North Dakota fielded a team of five with three support personnel. The UND group flew a bright green Super Decathlon.

• • • •

I had the opportunity to talk to a few of these young people and found their stories fascinating.

Jenna Coffman was motivated toward an aviation career when she received a Young Eagle ride at age 15. She started flight training shortly after she turned 17 and received her Certified Flight Instructor license (CFI) on her 19th birthday. She then began teaching a younger sister to fly. Jenna competes with the MSU team while pursuing a degree in aerospace engineering.

Roger Austin Belleau is a technician in the Colorado Air Guard. He's enrolled in the commercial aviation program at MSU as a route to a career in military aviation.

Daniel Wilmoth was a Business Administration major but found he had neither the interest nor skill set for accounting.



Aerobatic competition contestants (left to right): Craig Fitzgerald - 1st place, Intermediate; Ashton Croy - 1st time Sportsman; Michael Lents - 2nd place, Intermediate; Alex Hunt - 3rd place, Sportsman & Grass Roots Flight Medal; Leo Garzon Gonzalez - 2nd place, Primary; Michael Forney - 2nd place, Advanced; Kiley Lynch - 3rd place, Primary; John Ostmeier - 1st place, Advanced; Daniel Wilmoth - 1st place, Primary; Jon Vanderhoof - 3rd place, Intermediate; Ben Bagby - 1st place, Sportsman; Jay Hansen - 2nd place, Sportsman; Dick Fennal - 3rd place, Advanced.

Cover photo - Liz Birch flies inverted.



A family enjoys the Midwest Aerobatic Championship while seated near a helicopter flown in Vietnam by Seward Airport Manager Greg Whisler.

Upon hearing there is a demand for airline pilots, he transferred to the flight program. His short-term goal is to complete his CFI rating.

Leo Garzon's goal is simple. He wants a pilot's seat on the airlines.

While visiting with the Metropolitan State University group, I was impressed with how fast they are working their way through the program. A couple of them are flying competition aerobatics only a little more than a year into their flying education and are bringing back first- and second-place trophies! Even more impressive is they are doing it in the Pitts Special, a plane sometimes considered a handful for low-time pilots.

When Elizabeth Birch received an EAA Young Eagle ride at age 13, she knew she wanted to make flying airplanes her life work. She received the four-year degree in Commercial Aviation in just two and a half years and is now employed as an instructor in the UND flight program. Liz has been hired

by Wisconsin Airlines, reports for training in September, and will be flying in the right seat of a regional jet airliner by Christmas! Liz came to the MAC80 meet to compete in the Sportsman category and to serve as the safety pilot that rides the back seat of the Decathlon for the beginning competitors that are not yet qualified for solo aerobatics.

Meeting with these young people, I found them energetic, focused, dedicated, personable and motivated. With a new generation as fine as these, the future of aviation and American society is assured.

Unfortunately, the weather didn't hold. On Sunday, low ceilings canceled competition, so an awards ceremony was held before the contestants disbanded. ■

The Grass Roots Achievement Flight Medal acknowledges the IAC's commitment to grass roots development of the sport. The medallion is awarded to the highest scoring pilot in each category whose aircraft meets certain horsepower and speed limitations.



Several aircraft flown during the Midwest Aerobatic Championship.

Gordon Hosts Annual State Fly-In Event

By Glen E. Spaugh
City Manager & Airport Manager, Gordon, Nebraska

On Saturday, June 1, something very special occurred in the panhandle city of Gordon. Over 300 people joined together, from all walks of life, with a single focus and interest in mind. Some were serious enthusiasts while others simply enjoyed watching one of the few events which cannot happen without mechanical intervention into human restrictions—the joy of flying!

The day began with a very important part of any gathering—food! State Senator Col. Tom Brewer addressed the attendees. A C-135 from the Nebraska Air National Guard on its way to Scottsbluff did a flyover. Kurt Muhle in his 1941 Voltec BT13 and Keith Harbour piloting a Nanchang CJ-6 gave two privileged passengers a ride by doing formation flying in the blue skies of the Sandhills. Both pilots are from Avcraft in Columbus, Nebraska, who specialize in restoring vintage airplanes. Throughout the day seven private pilots also made their appearance with a flour drop competition between three of them; as well as Pilatus medical air transportation planes from Air Link in Scottsbluff and Air Methods in North Platte.

It is hopeful to do it again next year, even though it would not be state sponsored. The sheer joy of watching the dynamics of those in attendance, from the vendors to committee members, presented hope for those who live in this area of the state and a confidence that we can accomplish something special when there is unity and a single focus on an event. ■



Attendees check out the aircraft at Gordon Airport's 27th Annual State Fly-in Event.



Pictured l to r - Doug Woodbeck, Gordon Airport Authority Board Member; Glen Spaugh, Gordon City Manager & Airport Manager; and Diane Bartels of the Nebraska Aviation Council.



Two warbirds are in formation on the runway, ready for takeoff at the Gordon Fly-In Event held June 1st.

Aviation Industry Welcomes Women



Ann Richart

In 1928, Amelia Earhart became the first woman to fly solo across the Atlantic Ocean. In 1972, she became my first role model. As a young girl, Amelia Earhart became my example, not because of her aviation accomplishments, but because she refused to be limited by her gender.

Now, having loved my career in aviation since 1985, I feel a responsibility to help girls feel that same sense of independence. In June, I was delighted that we had the opportunity to host a group of girls who were participating in Cornhusker Girls State. This was a great chance to demonstrate for these future leaders that girls can accomplish anything. These teenagers were engaged and asked smart questions about the role that NDOT's Division of Aeronautics plays in advancing aviation in Nebraska and career opportunities that they can expect.

On June 1, I attended the Nebraska State Fly-In in Gordon. I was delighted to meet Diane Bartels there and pick up a copy of her book, *Sharpie: The Life Story of Evelyn Sharp Nebraska's*

Aviatrix. While I was talking to Diane, we were joined by a 10-year-old girl who said she already flies her dad's plane. This amazing girl is looking forward to a career in aviation.

Later, I attended the annual conference of the American Association of Airport Executives. At this event, I met with several young women from Metropolitan State University in Denver, Kansas State University, and other colleges across the country who were pursuing careers in aviation. Several of these college students already had pilot ratings and were interested in the plethora of career choices that would be open to them.

In the coming decade, our industry will require new pilots, mechanics, air traffic controllers, airport managers, and many other professionals who understand the importance of aviation to our national and regional economies, and who are willing to think innovatively to shape the changing technological and cultural landscape of our industry to continue to meet the needs of our citizens and economy. It is refreshing and encouraging to know that we have a pipeline of girls and young women eager to continue to be leaders through aviation in the future! ■

Local Pilot Presented Master Pilot Award

By David Morris



David Moll received the Master Pilot Award, pictured with his wife, Nancy.

Roger Zimmerman, Manager of the Lincoln Flight Standards Office, presented David Moll with the Master Pilot Award on July 1st at Duncan Aviation in Lincoln, Nebraska. This award is the Federal Aviation Administration's (FAA) most prestigious award issued to pilots

certified under Title 14 of the Code of Federal Regulations (14CFR) part 61. This award is named after the Wright Brothers, the first U.S. pilots, to recognize individuals who have exhibited professionalism, skill and aviation expertise for at least 50 years while piloting as "Master Pilots."

Present with David was his wife Nancy. Nancy was also recognized by the FAA and presented a stickpin similar in design to the lapel pin David received in recognition of her

support to David's aviation career. David admits that his aviation accomplishments would not have been possible without the support of Nancy, who is also an FAA certificated pilot and former aircraft owner.

David began his career in aviation by completing his Private Pilot Certificate in 1971. By 1976, he had completed his advanced FAA certificates, ratings, earned a Bachelor of Science degree in Business and received his Learjet type rating. David's vast aviation career encompasses piloting for Duncan Aviation, serving as a Chief Pilot in Atlanta, GA, flying for the NDOT-Division of Aeronautics, as well as past president of both the Denver Aerobatic Club and the Midwest Aerobatic Club.

After 51 years of flying, David holds type ratings in the Learjet, Hawker, Falcon 10, Citations 500, 650 and 750. David's Pilot Certificate includes an Airline Transport Pilot (ATP) with airplane category multi-engine class rating along with a Certified Flight Instructor "Instrument" (CFII) and Multi-Engine Instructor (MEI). David will now be added to the FAA's "Roll of Honor" located at www.faasafety.gov/content/MasterPilot/RecipientList.aspx. We congratulate David, along with his wife Nancy, on a "Job Well Done." ■



A large gathering was on hand June 22 for the annual pancake breakfast at the Aurora Airport, and a ribbon cutting was held to dedicate the new runway.

New Aurora Airport Runway Dedicated

Partial reprint from News-Register/Richard Rhoden and Kurt Johnson co-publisher

State and local aviation officials dedicated a new 4,300-foot runway at the Aurora Municipal Airport June 22, one of the highlight events of the annual A'ROR'N Days celebration.

Ann Richart, NDOT Aeronautics Division Director, spoke during the dedication ceremony, congratulating all involved with the Aurora Airport Authority for its long-term commitment to the airport as well as its detailed fiscal planning. "The Aurora Airport really supports agriculture aviation and the corporate jets that are flying in here to do business in this region," she said. "That's exactly why the airport exists and you have a very strong story to tell."

The Aurora Airport officially opened on October 12, 1969. After many years of maintenance and repairs on the runway, planning began several years ago to seek federal funding to help replace the 3,700-foot structure. Work began in the fall of 2018, when the runway was closed and crews from Cozad-based Paulsen, Inc., removed the existing structure. Though a wet spring and early summer caused delays, the runway was completed on schedule in mid-June, with painting work all that remained at the time of the dedication.

Ross Beins, past-chairman of the Aurora Airport Authority, noted that the airport plays a major role in the ability for Aurora to expand. Beins said, "For some of the corporations that have come here – Aventine Renewable Energy and Love's – they needed an airport in order to locate a business here." Beins also recognized that farming played an extensive role as the airport does all the maintenance and repair for the Aurora Cooperative spraying operations that serves many of farms in the area.

Over the years, many improvements have been made at the airport, but none have been bigger, or more costly, than the \$3.8 million runway replacement project. Beins, who resigned his position as Aurora Airport Authority chairman last month, ending a lifelong career in aviation, said the runway project has been on the drawing board for years, both in terms of planning and funding. During the last 12 years funding for airport improvements was made available from FAA federal grant programs, the NDOT Aeronautics Division grant programs, location foundation grants, and also with supportive funding from the taxpaying citizens of Aurora and Hamilton County. He was pleased to announce there are no bonds and the airport runway is paid for. ■

Girls State 2019 Reps Visit NDOT Division of Aeronautics

By David Morris



The American Legion Girls State program began in 1937 and is a nonpartisan program that teaches young women responsible citizenship. The delegates study local, county and state government by setting up their own miniature governments and administering them according to the rules and procedures set by Nebraska's laws.

On Thursday, June 6, seven ladies, who had just completed their junior year of high school, visited NDOT's Division of Aeronautics. They were greeted by Director Ann Richart, who provided an overview on the responsibilities and goals of the division and described the various opportunities available for anyone pursuing a career in aviation. The group was also provided a tour of the state-owned aircraft, Beechcraft King Air C90GTx. For some, this was their first experience of being near a general aviation aircraft.

Each of the seven individuals involved in the visit held an elected position that would simulate the structure of the department. Representatives were: Mallory Rochette of Bloomington as Director; Kaelyn Drury of Blue Hill as Deputy Director; Tyra Bonneau of Bancroft as Aeronautics Commissioner; Savannah Cooney of Arthur as Aeronautics Commissioner; Katie Kopetzky of Stromsburg as Aeronautics Commissioner; Winona Mitchell of Edison as Aeronautics Commissioner; and, Elizabeth Spellman of Lincoln as Aeronautics Commissioner. ■

Above - Girls State 2019 representatives stand in front of the state-owned aircraft with Ann Richart, Director of NDOT's Division of Aeronautics.

Below - Ann Richart shares information about careers in aviation with Girls State representatives.



PIREPS

NDOT-Division of Aeronautics
PO Box 82088
Lincoln, NE 68501

Address Service Requested

Member National Association of
State Aviation Officials

PSRT STD
US POSTAGE
PAID
PERMIT 293
LINCOLN, NE



Pilot Info ...

To mitigate the risk of wrong surface operations, every user of the airfield can:

- Review the Airport Diagram prior to operation
- Review Visual Cues –
 - Runway vs. Taxiway
 - Paint: White or Yellow
 - Lights: White or Blue/Green
- Use common Verbal Cues –
Use of “Active Runway”
- Be familiar with Runway Holding Position Markings
- “Close the Loop” with Read back / Hear back

Fly-in Information Events Calendar

Aug. 23-25 – Seward Municipal Airport (KSWT)

Nebr. Chapter of the Antique Airplane Association

Friday: lunch & dinner served

Saturday: donuts/coffee in the morning, lunch,
dinner & chapter meeting @ 7 p.m.

Contact Todd Harders: 308-380-5079

Sept. 7 – Norfolk Regional Airport (OFK)

Barnstormers Restaurant “Wine & Wings”

Live Music: 5 p.m. to close

Crete Skydive tandem jumping all day

Sept. 8 – Norfolk Regional Airport (OFK)

75th Anniversary

Pancake breakfast: 7 - 11 a.m.

Food Truck: 11a.m. - 4 p.m.

Various static displays

Crete Skydive tandem jumping all day

Sept. 28 – Pawnee City (50K)

Fly-In breakfast: 7 - 11 a.m.

Flour drop contest: 10 a.m.

Contact Matthew Christen: 402-335-0256